

Appl. No.: 10/618,223
Amdt. dated 06/15/2006
Reply to Office Action of March 16, 2006

REMARKS/ARGUMENTS

The amendments above and remarks below are in response to an Office Action that was mailed on March 16, 2006 pertaining to the above-listed patent application. In the Office Action, all of the pending claims were rejected. In particular, Claims 1, 3, 5-7, 10, 12, 13, 37, 39, 41 and 43 were rejected under 35 U.S.C. 102(b) over U.S. Patent No. 4,489,732 to Hasson (“Hasson”). Also, Claims 1, 3-8, 10-24, 37 and 39-42 were rejected under 35 U.S.C. 103(a) over U.S. Patent No. 5,919,147 to Jain (“Jain”) and U.S. Patent No. 5,010,892 to Colvin et al. (“Colvin”).

Objections

Claim 24 was objected to for reading “on” instead of “an” at line 3. This has been corrected in the amendments above, and the objection therefore overcome.

Rejections under 35 U.S.C. 102(b) and 103(a)

Claim 1 of the present application has been amended to recite a measurement assembly with legs in flush contact from their distal to their proximal ends when closed within an exterior conduit.

Hasson

Hasson discloses gynecological instrument including an elongated probe 10 that has an internal rod 16 received within a sleeve 18. A distal end 20 of the rod is fixed to a distal end 22 of the sleeve. Two slits 24 are defined in opposite sides of the sleeve. When the rod is retracted within the sleeve, the sleeve separates at the slits into wings 26, as shown in Figure 3. Unlike Claim 1 of the present application, the wings 26 disclosed by Hasson are not configured to fit within an exterior conduit. Instead, the wings of Hasson themselves are formed of the sleeve 18 and the solid internal rod 16 extends within the sleeve.

Hasson discloses that the probe 10 extends out of a stop disk 52 having a surface 54 facing the distal end 22 of the sleeve. The disk 52 includes an axial sleeve 56 which is

fitted on an elongated tube 58 reciprocally mounted on the probe. However, the portion of the probe 10 having the wings 26 is not shown in the figures by Hasson as being retracted within the axial sleeve 56 or the elongated tube 58.

Applicant's attorney could find no disclosure or suggestion that the portion of the sleeve 18 having the slits can be wholly retracted within the disk 52, sleeve 56 or tube 58. Hasson describes the two extreme positions of the probe as being illustrated in Figures 2 and 3 at column 3, lines 25-30, neither of which shows the wings 26 residing within the disk 52, sleeve 56 or tube 58. In addition, the procedure described by Hasson (at the bottom of column 3 and top of column 4) for using the instrument makes no reference to the instrument being capable of fully retracting the probe 10 within the disk 52, sleeve 56 or tube 58.

Colvin

Colvin discloses a measuring instrument 10 having a sleeve 12, a handle 14 and a flexible cable 16 positioned within the sleeve, as shown in Figures 1 and 2. At a distal end of the flexible cable is a bifurcated probe having a memory for an outwardly curved shape when extended from the sleeve. A scale 24 is correlated to the deployment of the probe and provides a diameter measurement of a lumen. Ends of the bifurcated portions of the flexible cable each include a rounded ball.

Colvin discloses the flexible cable that bifurcates to allow measurement of the lumen. However, the rounded ball at the end of each of the bifurcated portions of the cable prevent the portions from lying substantially flush against each other from their proximal to distal ends when being retracted within an exterior conduit. Colvin, therefore, would not overcome Hasson's failure to teach or suggest Claim 1 of the present application.

Jain

Jain discloses a vascular measuring device 10 including a sheath 22, a catheter 24 and a sensor 26, as shown in Figures 1-4. A proximal end 38 of the catheter includes

graduated markings 42, while the distal end 40 supports the sensor 26. The sensor 26 includes several radially outwardly-biased filaments 44. When the catheter is retained within the sheath, the filaments of the sensor are within the sheath. When deployed from the sheath, the filaments of the sensor fan outward. Notably, even when retained, the filaments of the sensor still have a spread-apart fan-like configuration, as shown in Figure 2.

In another embodiment, Jain discloses a different sensor 54, as shown in Figures 5 and 6. The sensor 54 includes a pair of outwardly-biased arcuate arm springs 56 and 58. These springs are in a “longitudinally flat position” when in a retracted position within the sheath 22. However, as shown in Figure 5 even the ostensibly flat position still has a significant gap between the arm springs 56 and 58. Neither of these embodiments discloses the arm springs or filaments lying substantially flush against each other from their proximal to distal ends when being retracted within an exterior conduit.

In addition, even though the arm springs 56 and 58 are shown as retracted within sheath 32, the purpose of the sheath is to partially collapse the arm springs 56 and 58. In Hasson, however, the tension exerted by the internal rod 16 within the sleeve 18 collapses the wings 26 and an external sheath is not needed. Therefore, there is no motivation to combine Jain with Hasson.

Even if the retraction of the arm springs within a sheath disclosed by Jain were (incorrectly) combined with the probe and wings taught by Hasson, the net result of such a combination would at best needlessly increase the diameter of the device by the thickness of the sheath without any apparent functional advantage. Jain, therefore, does not overcome Hasson’s failure to teach or suggest the invention as recited in Claim 1.

None of the remaining references appears to overcome Hasson, Colvin and Jain’s failure to teach or suggest Claim 1 of the present invention.

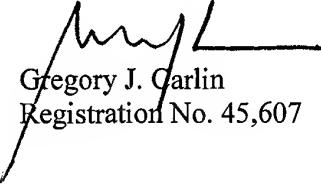
The remaining independent Claims 7, 24 and 37 have also been amended to have similar recitations to Claim 1. All of the dependent claims depend from and further patentably distinguish one of the independent claims. The rejections of Claims 1, 3-8, 10-24, 37 and 39-43 under 35 U.S.C. 102(b) and 103(a) have therefore been overcome.

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In view of the remarks and amendments presented above, it is respectfully submitted that Claims 1, 3-8, 10-24, 37 and 39-43 of the present application are in condition for allowance. It is respectfully requested that a Notice of Allowance be issued in due course. The Examiner is requested to contact Applicants' undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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